

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 December 2005 (01.12.2005)

PCT

(10) International Publication Number  
**WO 2005/114871 A3**

(51) International Patent Classification:  
*H04B 7/15 (2006.01)*

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CI, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PI, PT, RO, RU, SC, SD, SE, SG, SK, SI, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
*PCT/US2005/016749*

(22) International Filing Date: 11 May 2005 (11.05.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/570,067 12 May 2004 (12.05.2004) US  
60/570,081 12 May 2004 (12.05.2004) US  
60/570,082 12 May 2004 (12.05.2004) US

(71) Applicant (for US only): **ANDREW CORPORATION**  
[US/US]; 19700 Janelia Farm Boulevard, Ashburn, VA  
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BECK, Andrew**  
[US/US]; 21576 Lel'evre Inn Drive, Ashburn, VA 20148  
(US). **KENNEDY, Joseph, P.** [US/US]; 11127 Elmview  
Place, Herndon, VA 22066 (US).

(74) Agent: **COMTOIS, Mark, C.**; 1667 K Street, N.W., Suite  
700, Washington, DC 20006 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
31 August 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/114871 A3

(54) Title: SYSTEM AND METHOD FOR DETECTION OF MOBILE OPERATING THROUGH A REPEATER

(57) Abstract: A system and method for a network analysis system operating in a wireless communication system with repeaters is disclosed. Embodiments of the system and method enable the network analysis system to determine if signals being received by the network receivers arrive directly from a target mobile appliance or if the signals are passing through a repeater. The repeaters through an augmentation measure attribute of a received signal to a network manager and based on these attributes it is determined whether the signal is served by a repeater or other network device.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
1 December 2005 (01.12.2005)

PCT

(10) International Publication Number  
**WO 2005/114871 A2**

(51) International Patent Classification<sup>7</sup>: **H04B 7/15** (74) Agent: COMTOIS, Mark, C.; 1667 K Street, N.W., Suite 700, Washington, DC 20006 (US).

(21) International Application Number:  
**PCT/US2005/016749**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GI, GM, IIR, IIU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PI, PT, RO, RU, SC, SD, SE, SG, SK, SI, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 11 May 2005 (11.05.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/570,067 12 May 2004 (12.05.2004) US  
60/570,081 12 May 2004 (12.05.2004) US  
60/570,082 12 May 2004 (12.05.2004) US

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IIU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for US only): ANDREW CORPORATION [US/US]; 19700 Janelia Farm Boulevard, Ashburn, VA (US).

(72) Inventors; and

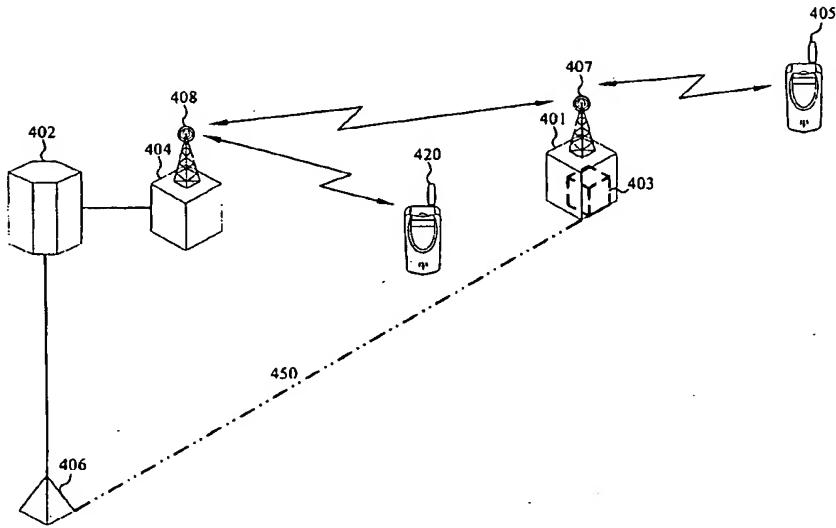
(75) Inventors/Applicants (for US only): BECK, Andrew [US/US]; 21576 LeFevre Inn Drive, Ashburn, VA 20148 (US). KENNEDY, Joseph, P. [US/US]; 11127 Elmview Place, Herndon, VA 22066 (US).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR DETECTION OF MOBILE OPERATING THROUGH A REPEATER



(57) Abstract: A system and method for a network analysis system operating in a wireless communication system with repeaters is disclosed. Embodiments of the system and method enable the network analysis system to determine if signals being received by the network receivers arrive directly from a target mobile appliance or if the signals are passing through a repeater. The repeaters through an augmentation measure attribute of a received signal to a network manager and based on these attributes it is determined whether the signal is served by a repeater or other network device.

WO 2005/114871 A2

WO 2005/114871 A2



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*